

REMARKS / ARGUMENTS

In complete response to the Final Office Action of August 29, 2005, on the above identified application, reconsideration is respectfully requested. Claims 12-15, 17-24, and 26-40 are pending in this application.

Claim Rejections Under 35 U.S.C. § 103:

Claims 12 – 15, 17 – 24, and 26 – 40 currently stand rejected under 35 U.S.C. 103(a) as being unpatentable over Vaidya, et al. (6,051,805) taken with the WIPO document no. WO02/058878. The Applicants respectfully submit that these claims are not unpatentable over Vaidya '805 taken with WIPO '878.

Vaidya '805 discloses a method and a system of managing an electric arc welding shop. Central to the Vaidya '805 disclosure is the use of a performance arc time measurement apparatus (the "PATM apparatus") to control the welding process. This **PATM apparatus** is installed on each welding power source, and used to generate the welding arc, as well as for **calculating and measuring all** the various disclosed parameters (see col. 2, line 34 – 35 of Vaidya '805).

WIPO '878 generally discloses the possibility of controlling a welding process from a remote location. Therefore, **the combination** of Vaidya '805 with WIPO '878 would **teach toward** a remotely operated **welding system** which is **controlled by a PATM** device installed on each power source.

In contrast, the present invention teaches a welding system which **does not rely on a PATM apparatus**. In the present invention, the calculating and measuring of the wire speed and the current is performed **with a remote sensor**, not a PATM. The sensor data is then transmitted, via a communication network, to a **central remote control device** which controls the overall welding process, as opposed to local control at the power source by the PATM.

The remote sensors of the present invention differ greatly from the PATM of Vaidya '805 in that sensors are less expensive, more readily commercially available, and easier to install. Furthermore the use of one central control device, as taught in the

current invention, is an improvement over the PATM apparatus of Vaidya '805 in that it reduces the number of control devices and simplifies the welding control process.

A person of ordinary skill in the art would not find that all the elements of the present invention are either suggested or taught by the combination of Vaidya '805 with WIPO '878. Furthermore, a person of ordinary skill in the art would find no motivation to combine these two references. The remotely operated welding system of Vaidya '805 and WIPO '878, which employs **PATM** apparatus installed **on each** power source, teaches away from the present invention's **centrally controlled** system which operates in the **absence of local PATM** control.

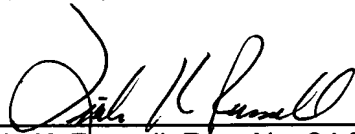
For these reasons, the Applicants respectfully contend that this basis for rejection deserves reconsideration.

Appl. No. 10/630,241
Amdt. dated October 31, 2005
Reply to Final Office Action of August 29, 2005

CONCLUSION

Accordingly, it is believed that the present application now stands in condition for allowance. Early notice to this effect is earnestly solicited. Should the Examiner believe a telephone call would expedite the prosecution of the application, he is invited to call the undersigned attorney at the number listed below.

Respectfully submitted,



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CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 31st day of October, 2005.

Diana Guzman

